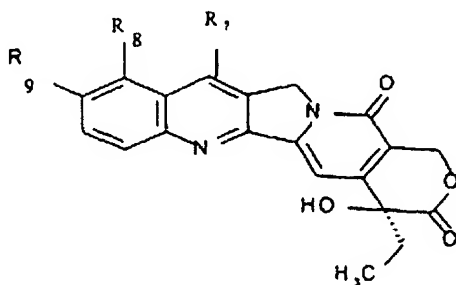


**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.-70. (Canceled).

71. (Currently Amended) A method of intracellular delivery into tumor cells of taxol or a camptothecin derivative of formula



wherein: R<sub>7</sub> is a  $-C(R_{11})=N-O_{(n)}R_{10}$  group, wherein R<sub>10</sub> is hydrogen or a C<sub>1</sub>-C<sub>5</sub> alkyl or C<sub>2</sub>-C<sub>5</sub> alkenyl group, linear or branched or C<sub>3</sub>-C<sub>10</sub> cycloalkyl, group or a linear or branched (C<sub>3</sub>-C<sub>10</sub>) cycloalkyl - (C<sub>1</sub>-C<sub>5</sub>) alkyl group, or C<sub>6</sub>-C<sub>14</sub> aryl, or a linear or branched (C<sub>6</sub>-C<sub>14</sub>) aryl - (C<sub>1</sub>-C<sub>5</sub>) alkyl group, or a heterocyclic or linear or branched heterocyclo - (C<sub>1</sub>-C<sub>5</sub>) alkyl group, said heterocyclic group containing at least a heteroatom selected from the group consisting of nitrogen atom, optionally substituted with a (C<sub>1</sub>-C<sub>5</sub>) alkyl group, and/or oxygen and/or sulfur; said alkyl, alkenyl, cycloalkyl, cycloalkylalkyl, aryl, aryl-alkyl, heterocyclic or heterocyclo-alkyl groups, being optionally substituted with other groups selected from the group consisting of: halogen, hydroxy, C<sub>1</sub>-C<sub>5</sub> alkyl, C<sub>1</sub>-C<sub>5</sub> alkoxy, phenyl, cyano, nitro, -NR<sub>12</sub>R<sub>13</sub>, wherein R<sub>12</sub> and R<sub>13</sub>, which may be the same or different, are hydrogen, linear or branched (C<sub>1</sub>-C<sub>5</sub>) alkyl; a

pharmaceutically acceptable ester of the  $-\text{COOH}$  group; or the  $-\text{CONR}_{14}\text{R}_{15}$  group, wherein  $\text{R}_{14}$  and  $\text{R}_{15}$ , which may be the same or different, are hydrogen or linear or branched ( $\text{C}_1\text{-C}_5$ ) alkyl; or

$\text{R}_{10}$  is a ( $\text{C}_6\text{-C}_{10}$ ) aroyl residue optionally substituted by one or more groups selected from the group consisting of: halogen, hydroxy, linear or branched ( $\text{C}_1\text{-C}_5$ ) alkyl,  $\text{C}_1\text{-C}_5$  alkoxy, phenyl, cyano, nitro,  $-\text{NR}_{16}\text{R}_{17}$ , wherein  $\text{R}_{16}$  and  $\text{R}_{17}$ , which may be the same or different, is hydrogen, linear or branched ( $\text{C}_1\text{-C}_8$ ) alkyl;

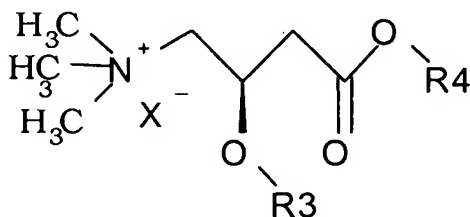
$\text{N}$  is the number 0 or 1;

$\text{R}_{11}$  is hydrogen, linear or branched  $\text{C}_1\text{-C}_5$  alkyl, linear or branched  $\text{C}_2\text{-C}_5$  alkenyl,  $\text{C}_3\text{-C}_{10}$  cycloalkyl, ( $\text{C}_3\text{-C}_{10}$ ) cycloalkyl - linear or branched ( $\text{C}_1\text{-C}_5$ ) alkyl,  $\text{C}_6\text{-C}_{14}$  aryl, ( $\text{C}_6\text{-C}_{14}$ ) aryl - linear or branched alkyl ( $\text{C}_1\text{-C}_5$ );

$\text{R}_8$  and  $\text{R}_9$ , which may be the same or different are hydrogen, hydroxy, linear or branched  $\text{C}_1\text{-C}_5$  alkoxy;

their  $\text{N}_1$ -oxides, their single isomers, in particular the syn and anti isomers of the  $-\text{C}(\text{R}_{11})=\text{N}-\text{O}(\text{n})\text{R}_{10}$  group, their possible enantiomers, diastereoisomers and relative admixtures, the pharmaceutically acceptable salts thereof;

using a liposome ~~comprising~~ consisting of a compound of formula (II)



(II)

where:

$\text{R}_3$  is a saturated linear or branched acyl chain, with 4-26 carbon atoms;

$R_4$  is a saturated or unsaturated, linear or branched alkyl chain, with 4-26 carbon atoms;  
and

$X^-$  is the anion of a pharmacologically acceptable acid,

with the proviso that said liposome is not:

miristoyl L-carnitine chloride tetradecyl ester,

palmitoyl L-carnitine bromide hexadecyl ester,

oleyl L-carnitine chloride oleyl ester.

72. (Previously Presented) The method according to claim 71, in which  $R_3$  is selected from the group consisting of nonanoyl, dodecanoyl, myristoyl, palmitoyl, stearoyl and oleoyl.

73. (Previously Presented) The method according to claim 71, in which  $R_4$  is selected from the group consisting of nonyl, undecyl, tetradecyl, hexadecyl and oleyl.

74. (Previously Presented) The method according to claim 71, in which  $X^-$  is selected from the group consisting of chloride; bromide; iodide; aspartate; acid aspartate; citrate; acid citrate; tartrate; acid tartrate; phosphate; acid phosphate; fumarate; acid fumarate; glycerophosphate; glucose phosphate; lactate; maleate; acid maleate; mucate; orotate; oxalate; acid oxalate; sulphate; acid sulphate; trichloroacetate; trifluoroacetate; methane sulphonate; pamoate and acid pamoate.

75. (Currently Amended) The method according to claim 71, in which the ~~compound~~ compound of formula (II) is selected from the group consisting of palmitoyl L-carnitine chloride undecyl ester; stearoyl L-carnitine chloride undecyl ester; stearoyl L-carnitine chloride tetradecyl ester; palmitoyl L-carnitine chloride tetradecyl ester; myristoyl L-carnitine chloride tetradecyl ester; palmitoyl L-carnitine bromide hexadecyl ester, and oleoyl L-carnitine chloride oleyl ester.

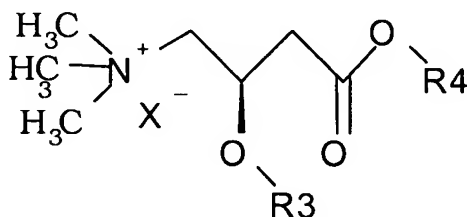
76. (Previously Presented) The method according to claim 71, in which said derivative of camptothecin is selected from the group consisting of 7-benzyloxyiminomethylcamptothecin and 7-butoxyiminomethylcamptothecin.

77. (Previously Presented) The method according to claim 71, in which the liposome additionally contains helper lipids.

78. (Previously Presented) The method according to claim 77, in which said helper lipid is selected from the group consisting of cholesterol, 1-palmitoyl-2-oleoyl phosphatidyl choline and dioleoyl phosphatidyl choline.

79.-85. (Canceled).

86. (Currently Amended) A composition ~~comprising~~consisting of a liposome comprising a compound of formula (II)



(II)

where:

$\text{R}_3$  is a saturated linear or branched acyl chain, with 4-26 carbon atoms;

$\text{R}_4$  is a saturated or unsaturated, linear or branched alkyl chain, with 4-26 carbon atoms;

with the proviso that said liposome is not:

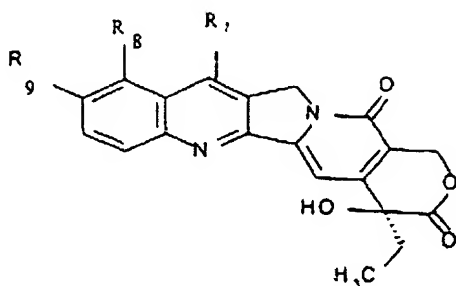
miristoyl L-carnitine chloride tetradecyl ester,

palmitoyl L-carnitine bromide hexadecyl ester,

oleyl L-carnitine chloride oleyl ester;

and

$X^-$  is the anion of a pharmacologically acceptable acid, said liposome comprising taxol or a camptothecin derivative of formula



wherein: R<sub>7</sub> is a  $-C(R_{11})=N-O_{(n)}R_{10}$  group, wherein R<sub>10</sub> is hydrogen or a C<sub>1</sub>-C<sub>5</sub> alkyl or C<sub>2</sub>-C<sub>5</sub> alkenyl group, linear or branched or C<sub>3</sub>-C<sub>10</sub> cycloalkyl, group or a linear or branched (C<sub>3</sub>-C<sub>10</sub>) cycloalkyl - (C<sub>1</sub>-C<sub>5</sub>) alkyl group, or C<sub>6</sub>-C<sub>14</sub> aryl, or a linear or branched (C<sub>6</sub>-C<sub>14</sub>) aryl - (C<sub>1</sub>-C<sub>5</sub>) alkyl group, or a heterocyclic or linear or branched heterocyclo - (C<sub>1</sub>-C<sub>5</sub>) alkyl group, said heterocyclic group containing at least a heteroatom selected from the group consisting of nitrogen atom, optionally substituted with a (C<sub>1</sub>-C<sub>5</sub>) alkyl group, and/or oxygen and/or sulfur; said alkyl, alkenyl, cycloalkyl, cycloalkylalkyl, aryl, aryl-alkyl, heterocyclic or heterocyclo-alkyl groups, being optionally substituted with other groups selected from the group consisting of: halogen, hydroxy, C<sub>1</sub>-C<sub>5</sub> alkyl, C<sub>1</sub>-C<sub>5</sub> alkoxy, phenyl, cyano, nitro, -NR<sub>12</sub>R<sub>13</sub>, wherein R<sub>12</sub> and R<sub>13</sub>, which may be the same or different, are hydrogen, linear or branched (C<sub>1</sub>-C<sub>5</sub>) alkyl; a pharmaceutically acceptable ester of the -COOH group; or the -CONR<sub>14</sub>R<sub>15</sub> group, wherein R<sub>14</sub> and R<sub>15</sub>, which may be the same or different, are hydrogen or linear or branched (C<sub>1</sub>-C<sub>5</sub>) alkyl; or R<sub>10</sub> is a (C<sub>6</sub>-C<sub>10</sub>) aroyl residue optionally substituted by one or more groups selected from the group consisting of: halogen, hydroxy, linear or branched (C<sub>1</sub>-C<sub>5</sub>) alkyl, C<sub>1</sub>-C<sub>5</sub> alkoxy,

phenyl, cyano, nitro,  $-NR_{16}R_{17}$ , wherein  $R_{16}$  and  $R_{17}$ , which may be the same or different, are hydrogen, linear or branched ( $C_1-C_8$ ) alkyl;

$n$  is the number 0 or 1;

$R_{11}$  is hydrogen, linear or branched  $C_1-C_5$  alkyl, linear or branched  $C_2-C_5$  alkenyl,  $C_3-C_{10}$  cycloalkyl, ( $C_3-C_{10}$ ) cycloalkyl - linear or branched ( $C_1-C_5$ ) alkyl,  $C_6-C_{14}$  aryl, ( $C_6-C_{14}$ ) aryl - linear or branched alkyl ( $C_1-C_5$ );

$R_8$  and  $R_9$ , which may be the same or different is hydrogen, hydroxy, linear or branched  $C_1-C_5$  alkoxy;

their  $N_1$ -oxides, their single isomers, in particular the syn and anti isomers of the  $C(R_{11})=N-O_{(n)}R_{10}$  group, their possible enantiomers, diastereoisomers and relative admixtures, the pharmaceutically acceptable salts thereof.

87. (Previously Presented) The composition according to claim 86, in which  $R_3$  is selected from the group consisting of nonanoyl, dodecanoyl, myristoyl, palmitoyl, stearoyl and oleoyl.

88. (Previously Presented) The composition according to claim 86, in which  $R_4$  is selected from the group consisting of nonyl, undecyl, tetradecyl, hexadecyl and oleyl.

89. (Previously Presented) The composition according to claim 86, in which  $X-$  is selected from the group consisting of chloride; bromide; iodide; aspartate; acid aspartate; citrate; acid citrate; tartrate; acid tartrate; phosphate; acid phosphate; fumarate; acid fumarate; glycerophosphate; glucose phosphate; lactate; maleate; acid maleate; mucate; orotate; oxalate; acid oxalate; sulphate; acid sulphate; trichloroacetate; trifluoroacetate; methane sulphonate; pamoate and acid pamoate.

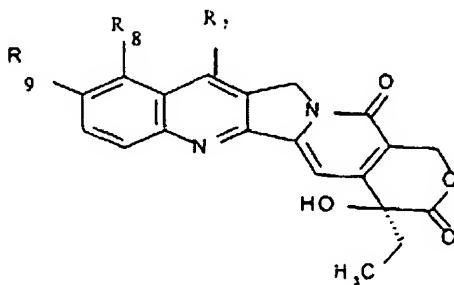
90. (Currently Amended) The composition according to claim 86, in which the compound of formula (II) is selected from the group consisting of: palmitoyl L-carnitine chloride undecyl ester; stearoyl L-carnitine chloride undecyl ester; stearoyl L-carnitine chloride tetradecyl ester; palmitoyl L-carnitine chloride tetradecyl ester; myristoyl L-carnitine chloride tetradecyl ester; palmitoyl L-carnitine bromide hexadecyl ester, and oleoyl L-carnitine chloride oleyl ester.

91. (Previously Presented) The composition according to claim 86, in which the liposome additionally contains helper lipids.

92. (Previously Presented) The composition according to claim 91, in which said helper lipid is selected from the group consisting of cholesterol, 1-palmitoyl-2-oleoyl phosphatidyl choline or dioleoyl phosphatidyl choline.

93. (Currently Amended) The composition according to claim 86, in which the composition is administered orally, parenterally, intravenously, intramuscularly, subcutaneously, transdermally or in the form of a nasal or mouth spray.

94. (Currently Amended) A method of transporting an antitumor drug to the target organ of a subject in need of antitumor treatment, wherein said drug is selected from the group consisting of taxol or a camptothecin derivative of formula



wherein:  $R_7$  is a  $-C(R_{11})=N-O_{(n)}R_{10}$  group, wherein  $R_{10}$  is hydrogen or a  $C_1$ - $C_5$  alkyl or  $C_2$ - $C_5$  alkenyl group, linear or branched or  $C_3$ - $C_{10}$  cycloalkyl, group or a linear or branched ( $C_3$ - $C_{10}$ ) cycloalkyl - ( $C_1$ - $C_5$ ) alkyl group, or  $C_6$ - $C_{14}$  aryl, or a linear or branched ( $C_6$ - $C_{14}$ ) aryl - ( $C_1$ - $C_5$ ) alkyl group, or a heterocyclic or linear or branched heterocyclo - ( $C_1$ - $C_5$ ) alkyl group, said heterocyclic group containing at least a heteroatom selected from the group consisting of nitrogen atom, optionally substituted with a ( $C_1$ - $C_5$ ) alkyl group, and/or oxygen and/or sulfur; said alkyl, alkenyl, cycloalkyl, cycloalkylalkyl, aryl, aryl-alkyl, heterocyclic or heterocyclo-alkyl groups, being optionally substituted with other groups selected from the group consisting of: halogen, hydroxy,  $C_1$ - $C_5$  alkyl,  $C_1$ - $C_5$  alkoxy, phenyl, cyano, nitro,  $-NR_{12}R_{13}$ , wherein  $R_{12}$  and  $R_{13}$ , which may be the same or different, are hydrogen, linear or branched ( $C_1$ - $C_5$ ) alkyl; a pharmaceutically acceptable ester of the  $-COOH$  group; or the  $-CONR_{14}R_{15}$  group, wherein  $R_{14}$  and  $R_{15}$ , which may be the same or different, are hydrogen or linear or branched ( $C_1$ - $C_5$ ) alkyl; or

$R_{10}$  is a ( $C_6$ - $C_{10}$ ) aroyl residue optionally substituted by one or more groups selected from the group consisting of: halogen, hydroxy, linear or branched ( $C_1$ - $C_5$ ) alkyl,  $C_1$ - $C_5$  alkoxy, phenyl, cyano, nitro,  $-NR_{16}R_{17}$ , wherein  $R_{16}$  and  $R_{17}$ , which may be the same or different, are hydrogen, linear or branched ( $C_1$ - $C_8$ ) alkyl;

$n$  is the number 0 or 1;

$R_{11}$  is hydrogen, linear or branched  $C_1$ - $C_5$  alkyl, linear or branched  $C_2$ - $C_5$  alkenyl,  $C_3$ - $C_{10}$  cycloalkyl, ( $C_3$ - $C_{10}$ ) cycloalkyl - linear or branched ( $C_1$ - $C_5$ ) alkyl,  $C_6$ - $C_{14}$  aryl, ( $C_6$ - $C_{14}$ ) aryl - linear or branched alkyl ( $C_1$ - $C_5$ );

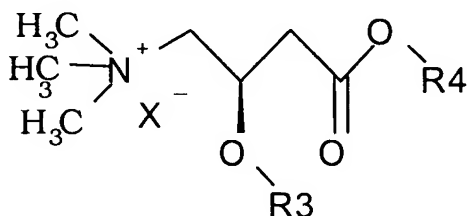
$R_8$  and  $R_9$ , which may be the same or different are hydrogen, hydroxy, linear or branched  $C_1$ - $C_5$  alkoxy;



their N<sub>1</sub>-oxides, their single isomers, in particular the syn and anti isomers of the-  
C(R<sub>11</sub>)=N-O<sub>(n)</sub>R<sub>10</sub> group, their possible enantiomers, diastereoisomers and relative admixtures,  
the pharmaceutically acceptable salts thereof;

said method comprising encapsulating said antitumor drug into a liposome

~~comprising~~ consisting of a compound of formula (II)



(II)

where:

$\text{R}_3$  is a saturated linear or branched acyl chain, with 4-26 carbon atoms;

$\text{R}_4$  is a saturated or unsaturated, linear or branched alkyl chain, with 4-26 carbon atoms;

and

$\text{X}^-$  is the anion of a pharmacologically acceptable acid, to obtain a liposome containing  
said antitumor drug,

with the proviso that said liposome is not:

miristoyl L-carnitine chloride tetradecyl ester,

palmitoyl L-carnitine bromide hexadecyl ester,

oleyl L-carnitine chloride oleyl ester;

and

administering said liposome to said subject.

95. (Previously Presented) The method according to claim 94, in which  $R_3$  is selected from the group consisting of nonanoyl, dodecanoyl, myristoyl, palmitoyl, stearoyl and oleoyl.

96. (Previously Presented) The method according to claim 94, in which  $R_4$  is selected from the group consisting of nonyl, undecyl, tetradecyl, hexadecyl and oleyl.

97. (Previously Presented) The method according to claim 94, in which  $X^-$  is selected from the group consisting of chloride; bromide; iodide; aspartate; acid aspartate; citrate; acid citrate; tartrate; acid tartrate; phosphate; acid phosphate; fumarate; acid fumarate; glycerophosphate; glucose phosphate; lactate; maleate; acid maleate; mucate; orotate; oxalate; acid oxalate; sulphate; acid sulphate; trichloroacetate; trifluoroacetate; methane sulphonate; pamoate and acid pamoate.

98. (Previously Presented) The method according to claim 94, in which the compound of formula (II) is selected from the group consisting of palmitoyl L-carnitine chloride undecyl ester; stearoyl L-carnitine chloride undecyl ester; stearoyl L-carnitine chloride tetradecyl ester; palmitoyl L-carnitine chloride tetradecyl ester; myristoyl L-carnitine chloride tetradecyl ester; palmitoyl L-carnitine bromide hexadecyl ester, and oleoyl L-carnitine chloride oleyl ester.

99. (Previously Presented) The method according to claim 94, in which said derivative of camptothecin is selected from the group consisting of 7-benzyloxyiminomethylcamptothecin or 7-butoxyiminomethylcamptothecin.

100. (Previously Presented) The method according to claim 94, in which the liposome additionally contains helper lipids.

101. (Previously Presented) The method according to claim 100, in which said helper lipid is selected from the group consisting of cholesterol, 1-palmitoyl-2-oleoyl phosphatidyl choline or dioleoyl phosphatidyl choline.

102. (Previously Presented) The method according to claim 94, wherein said antitumor drug is 7-butoxyiminomethylcamptothecin and said liposome comprises the compound palmitoyl L-carnitine undecyl ester.

103. (Previously Presented) The method according to claim 94, wherein said antitumor drug is taxol and said liposome comprises the compound palmitoyl L-carnitine undecyl ester.

104. (Previously Presented) The method according to claim 94, wherein said liposome is administered orally, parenterally, intravenously, intramuscularly, subcutaneously, transdermally or in the form of a nasal or mouth spray.

105. (Previously Presented) The method according to claim 94, wherein lungs are said target organ.

106. (Canceled).

107. (New) The method according to claim 71, wherein said liposome is in the form of a dry powder.

108. (New) The method according to claim 71, wherein said liposome is adsorbed on an inert support.

109. (New) The method according to claim 108, wherein the inert support is selected from the group consisting of sorbitol, threhalose and mannitol.

110. (New) The composition according to claim 86, wherein said liposome is in the form of a dry powder.

111. (New) The method according to claim 86, wherein said liposome is adsorbed on an inert support.

112. (New) The method according to claim 111, wherein the inert support is selected from the group consisting of sorbitol, threhalose, lactose and mannitol.

113. (New) The method according to claim 94, wherein said liposome is in the form of a dry powder.

114. (New) The method according to claim 94, wherein said liposome is adsorbed on an inert support.

115. (New) The method according to claim 114, wherein the inert support is selected from the group consisting of sorbitol, threhalose [vedi altri zuccheri negli esempi] and mannitol.